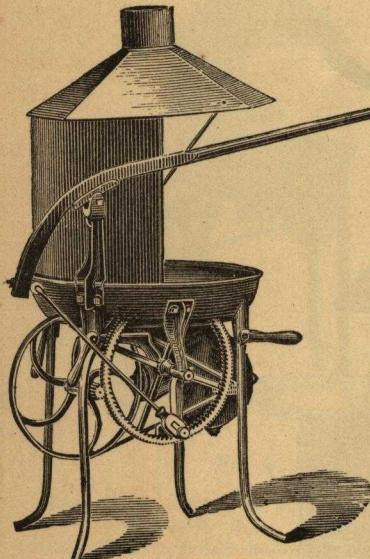
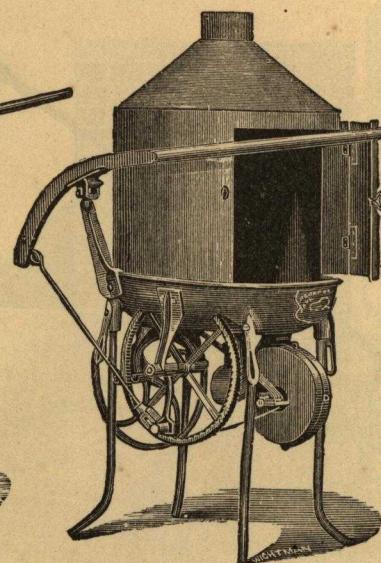


BUFFALO PORTABLE FORGES AND BLACKSMITHS' HAND BLOWERS.

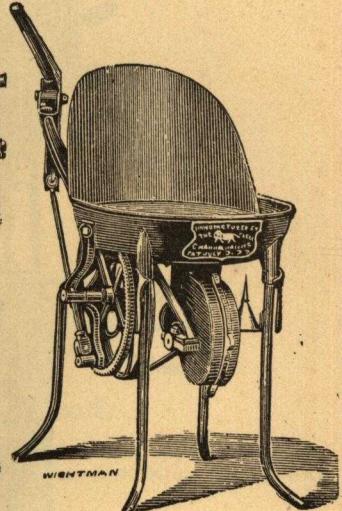
(C. Hammelmann's Patent, July 3, 1877.)



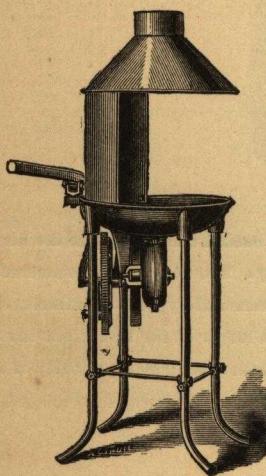
Forge No. 1.



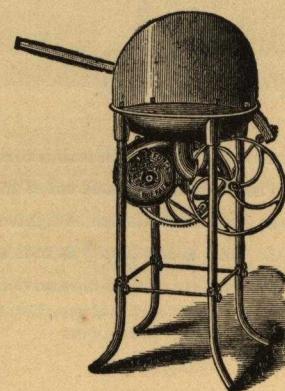
Forge No. 2.



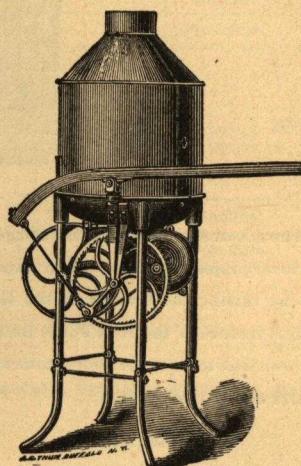
Forge No. 3.



Forge No. 4.



Forge No. 5.



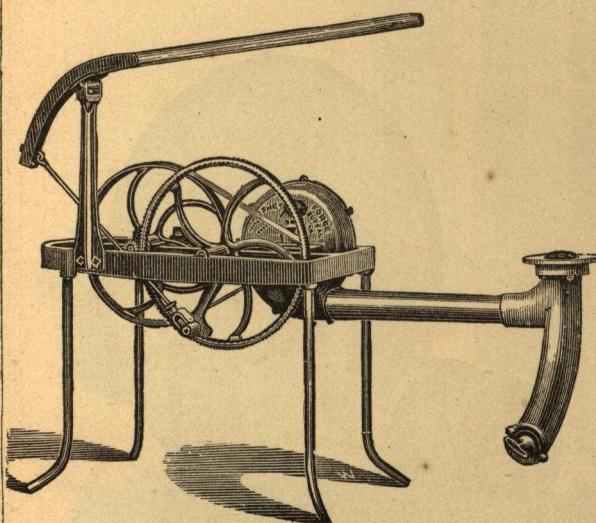
Forge No. 6.

Among the many points of superiority of the Buffalo Forge over all others, are strength, lightness, durability, workmanlike manner of construction, powerful blast, and ease with which same is operated. A glance at the cut will show the principle of their construction and the manner of operating. It is entirely new. There is no dead centre to overcome when starting up, and it is impossible to revolve the fan backwards. In operating it, one is not obliged to get down close to the fire and turn a crank in order to get his blast, but the movement of the lever (which requires but little power) in the Buffalo Forge, to drive the fan, is much like that of ordinary bellows, and being fixed on a swivel joint, has that easy motion which makes the work of operating it play instead of hard work. It also allows the operator to move about his fire on a radius of from three to six feet or more (according to size), without interrupting the blast. The machinery is all attached to the hearth, which makes it very compact. The legs are wrought iron pipe, and are screwed firmly into cast iron sockets projecting from the hearth. The working parts being entirely under the hearth, they are protected from cinders or danger of breakage.

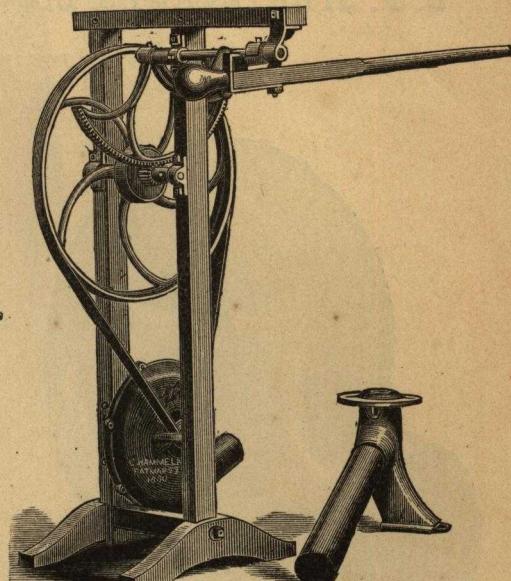
	Size of Fan.	Size of Hearth.	Height of Fireplace.	Weight.	Price.
Letter A, No. 1, Half Open Hood.....	8 inch.	21 x 27 inch.	29 inch.	150 pounds.	\$40 00
Letter A, No. 2, Entirely Closed Hood.....	8 " "	21 x 27 "	29 "	155 "	42 00
Letter A, No. 3, with Dash.....	8 "	21 x 27 "	29 "	148 "	36 00
Letter A, No. 4, Half Open Hood.....	6 "	18 in. diameter.	33 "	75 "	27 00
Letter A, No. 5, with Dash.....	6 "	18 " "	33 "	70 "	24 00
Letter A, No. 6, Entirely Closed Hood.....	6 "	18 " "	33 "	80 "	30 00

THE BUFFALO BLACKSMITHS' HAND BLOWERS.

ADAPTED FOR THE USE OF BLACKSMITHS IN GENERAL. MADE RIGHT AND LEFT HAND.



(C. Hammelmann's Patent, July 3, 1877.)



(C. Hammelmann's Patent, March 23, 1880.)

Blower No. 2, with Tuyere complete.....	\$32 00
Blower No. 2, without Tuyere.....	30 00

Blower No. 3, with Tuyere complete.....	\$25 00
Blower No. 3, without Tuyere.....	23 00

Our Hand Blowers are especially designed for all blacksmiths' purposes, for which we claim they far supersede the old-fashioned bellows, which is still worked, with all its tiresome encumberments and inconvenience. Others claim to have improved this highly important machine, but practical tests have easily demonstrated how far they have fallen short. From the generous reception given our Blower, and the many kind expressions and commendations which an earnest endeavor to please and satisfy has elicited, it is evident that we are right in saying they are the only perfect Blacksmiths' Hand Blowers made.

The Buffalo Blowers, unlike all others, are operated by means of a simple lever, which has the swivel motion, most natural to the blacksmith, and does not tire him. Another distinct feature of the Buffalo Blower is, that the blast does not stop as soon as you let go of the lever, but the fan will continue to blow for some minutes, thus allowing plenty of time to remove iron from the fire. Each Blower is supplied with one of our improved Tuyere Irons, which we advise to be used with the Blower.

Blower No. 2 is operated same as the Buffalo Forge, and is so simple in its construction, that, by reference to the above cut, one can easily understand its manner of operating.

Blower No. 3 is of an entirely new design, and is so simple in its construction, the operation so easy, the speed and efficacy so great, as to be truly marvelous. Their many points of evident superiority render their use almost a necessity in every shop where intelligent and progressive blacksmithing is conducted.

The accompanying cut shows the whole Blower with its lever in position, on a simple upright frame and fly-wheel. The latter revolves on a dead or fixed shaft. The impact is given to the fly-wheel by means of a number of pawls, pivoted to the plate, having a pinion engaged by the segment-wheel shown. These pawls act upon a ratchet casing, and are connected with the pawl-plate in such a manner that, when the handle is lifted, the pawls are positively disengaged, and when depressed, as positively engaged with the ratchet casing. By this construction the fly-wheel is enabled to make many revolutions by one single pressure of the handle, which will allow to keep the fan in motion without fatigue, and give plenty of time, between the successive strokes, to handle the iron operated upon, without abating the blast. It gives a strong, steady blast, with but little labor. It takes less room, and has all the advantages of the old-fashioned bellows, in that the blast continues for a time after the lever is at rest. It is the best, cheapest, most effective and positive Blower made, and is guaranteed to give perfect satisfaction in every respect, if used with our Tuyere. We offer the goods to our patrons and others with the utmost confidence.